DOCUMENT RESUME

ED 214 682 PS 012 793

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TITLE Preprimary Enrollment 1980.
INSTITUTION National Center for Education Statistics (ED), Washington, D.C.
REPORT NO NCES-82-109
PUB DATE [81]
NOTE 27p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Achievement; Blacks; Employed Women; *Enrollment Rate; *Enrollment Trends; Ethnicity; Family Income; Heads of Households; *Kindergarten Children; Mothers; National Surveys; *Nursery Schools; Preschool Education; *Socioeconomic Background; Spanish Americans; Tables (Data); Whites
IDENTIFIERS Full Day Programs; Half Day Programs; Preprimary Enrollment

ABSTRACT

This report presents data, obtained from the 50 states and Washington, D.C., on the October 1980 enrollments of 3- to 5-year-old children in nursery schools and kindergartens, excluding day care centers. The data were derived from special tabulations prepared for the National Center for Education Statistics (NCES) from the October 1980 Current Population Survey conducted by the United States Bureau of the Census. Enrollment rates are examined in terms of geographical region, family income, occupation and education of the head of the household, education and labor status of the children's mothers, trends in preprimary enrollments from October 1970 to October 1980, and enrollment characteristics of black children and children of Spanish origin. Definitions and explanations of terms mentioned throughout the report are provided in Appendix A, and information regarding the source and the reliability of the data are discussed in Appendix B. (Author/MP)

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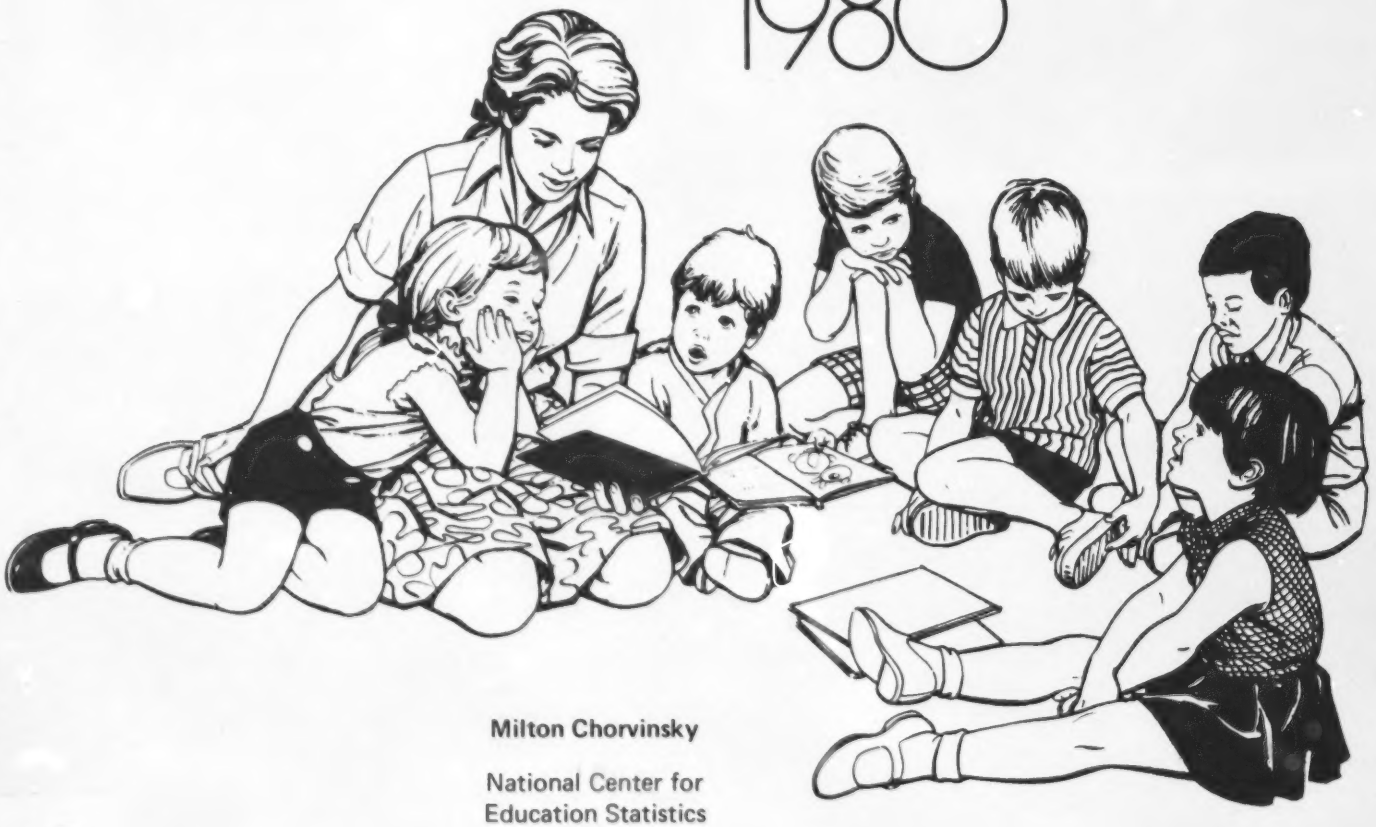

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PS 012793

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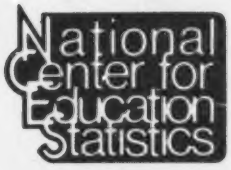

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Division of Statistical Services
Forms Management and Publications Branch
Loretta J. Wright, Editor

Foreword

This report presents October 1980 enrollment statistics of 3- to 5-year-old children in preprimary educational programs, specifically nursery schools and kindergartens. It is a continuation of a series of reports initiated in 1964, whose last report contained enrollment data for 1975.

Authorities in childhood education consider the preparation of children for formal schooling a worthwhile foundation, contributing to their success in the education system. Research shows that organized preprimary programs are important in preparing children for the experiences and demands they will encounter in the elementary grades.

To demonstrate the extent of participation in preprimary education, enrollment rates are examined here by selected socioeconomic factors defined by the U.S. Bureau of the Census.

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Introduction

Many Americans are becoming increasingly concerned about the availability of opportunities for preschool children to attend day care centers, nursery schools, and kindergartens, since record numbers of mothers with children under age 6 are working outside the home. U.S. Department of Labor statistics show that in spring 1980 2.9 million mothers of 3- to 5-year-old children were in the labor force. This report represents data on the October 1980 enrollments of children 3 to 5 years old in nursery schools and kindergartens, excluding day care centers. The data are derived from special tabulations prepared for the National Center for Education Statistics (NCES) from the October 1980 Current Population Survey conducted by the U.S. Bureau of the Census.

1980 Preprimary Enrollment Characteristics

In fall 1980, almost 5 million American children 3 to 5 years old were attending nursery schools or kindergartens that provided them with at least 2 hours of educational experience per day.[1] The following tabulation shows the total 3- to 5-year-old enrollment in preprimary schools:

Race	Number in population (thousands)	Enrollment (thousands)		
		Preprimary	Nursery school	Kindergarten
Total	9,284	4,878	1,981	2,897
White	7,581	3,994	1,632	2,362
Black	1,445	749	294	455
Other races	258	135	55	80

These 4.9 million children represented almost 53 percent of the 3- to 5-year-old population (table 1). While 2.5 million 5-year-olds (almost 82 percent of the population) were enrolled in kindergarten, almost 400,000 3- and 4-year-olds also attended kindergarten.[2] Of all the 3- and 4-year-olds in the population, nearly 37 percent attended either nursery schools or kindergartens. The majority of those enrolled (63 percent) attended public schools (table 2).[3] This is largely because 86 percent of the enrolled 5-year-olds who made up 53 percent of all preprimary attendees were enrolled in public programs. In contrast, the majority of enrolled 3- and 4-year-olds (57 percent) were in private nursery schools, with only 26 percent in public nursery schools, and the remaining 17 percent in kindergarten.

The tabulation below shows that over two-thirds of preprimary school enrollees attended part-day programs in fall 1980. Only 30 percent of kindergarten children and 34 percent of nursery school children attended full-day programs.

Preprimary programs, fall 1980	Percent enrolled			Number enrolled		
	Total	Part-day	Full-day	Total	Part-day	Full-day
Total	100.0	68.2	31.8	4,878	3,327	1,551
Nursery school	100.0	65.6	34.4	1,981	1,300	681
Kindergarten	100.0	70.0	30.0	2,897	2,027	870

[1] A nursery school is defined as a group or class that is organized to provide educational experiences for children during the year or years preceding kindergarten. These sometimes are called "preschool groups," and "cooperative nursery schools." A nursery class may be organized as part of an elementary school or as a separate school. The nursery school, as defined here, includes instruction as an important and integral phase of its program of child care.

[2] An additional 262,000 5-year-olds (8.5 percent of the population) were enrolled in schools above the kindergarten level.

[3] Refer to appendix A for definitions of public and private schools, and of part-day and full-day attendance.

Table 1.–Population and preprimary enrollment of children 3 to 5 years old, by level, control of program, age and race/ethnicity: 50 States and D.C., October 1980

(Number in thousands)

Age and race/ethnicity[1]	Number in population	Enrolled in preprimary			Enrolled in nursery school			Enrolled in kindergarten		
		Total	Public	Private	Total	Public	Private	Total	Public	Private
Total 3-5 years	9,284	4,878	3,066	1,812	1,981	628	1,353	2,897	2,438	459
White	7,581	3,994	2,392	1,602	1,632	428	1,204	2,362	1,964	398
Other races	1,703	884	674	210	349	200	149	535	474	61
(Black)	(1,445)	(740)	(586)	(163)	(294)	(180)	(114)	(455)	(406)	(48)
(Spanish origin)	(854)	(370)	(267)	(103)	(146)	(70)	(75)	(224)	(196)	(28)
Total 3 years	3,143	857	237	621	825	221	604	32	16	17
White	2,565	697	144	553	676	137	539	21	7	14
Other races	578	160	93	68	149	84	65	11	9	3
(Black)	(492)	(134)	(86)	(49)	(124)	(77)	(47)	(10)	(9)	(2)
(Spanish origin)	(303)	(54)	(18)	(36)	(54)	(18)	(36)	(0)	(0)	(0)
Total 4 years	3,072	1,423	602	821	1,064	363	701	359	239	120
White	2,509	1,146	429	718	886	264	621	261	164	96
Other races	563	277	173	103	178	99	80	98	75	24
(Black)	(481)	(237)	(155)	(82)	(152)	(89)	(63)	(85)	(66)	(19)
(Spanish origin)	(299)	(118)	(77)	(40)	(87)	(52)	(35)	(30)	(25)	(5)
Total 5 years	3,069	2,598	2,228	370	93	44	48	2,505	2,183	322
White	2,507	2,150	1,819	331	70	27	44	2,080	1,793	288
Other races	562	448	409	39	23	17	5	425	390	34
(Black)	(472)	(377)	(345)	(32)	(18)	(13)	(5)	(359)	(332)	(28)
(Spanish origin)	(252)	(198)	(172)	(26)	(4)	(0)	(4)	(194)	(172)	(22)
		Enrolled as percent of population								
Total 3-5 years		52.5	33.0	19.5	21.3	6.8	14.6	31.2	26.3	4.9
White		52.7	31.6	21.1	21.5	5.6	15.9	31.2	25.9	5.2
Other races		51.9	39.6	12.3	20.5	11.7	8.7	31.4	27.8	3.6
(Black)		(51.8)	(40.5)	(11.3)	(20.3)	(12.4)	(7.9)	(31.5)	(28.1)	(3.4)
(Spanish origin)		(43.3)	(31.3)	(12.1)	(17.1)	(8.2)	(8.8)	(26.2)	(23.0)	(3.3)
Total 3 years		27.3	7.5	19.7	26.2	7.0	19.2	1.0	0.5	0.5
White		27.2	5.6	21.6	26.4	5.3	21.0	0.8	0.3	0.5
Other races		27.7	16.1	11.8	25.8	14.5	11.2	1.9	1.6	0.5
(Black)		(27.3)	(17.5)	(9.9)	(25.3)	(15.7)	(9.6)	(2.1)	(1.7)	(0.3)
(Spanish origin)		(17.8)	(5.9)	(11.9)	(17.8)	(5.9)	(11.9)	(0)	(0)	(0)
Total 4 years		46.3	19.6	26.7	34.6	11.8	22.8	11.7	7.8	3.9
White		45.7	17.1	28.6	35.3	10.5	24.8	10.4	6.5	3.8
Other races		49.2	30.7	18.3	31.6	17.6	14.2	17.4	13.3	4.3
(Black)		(49.3)	(32.2)	(17.0)	(31.6)	(18.5)	(13.1)	(17.7)	(13.7)	(4.0)
(Spanish origin)		(39.5)	(25.8)	(13.4)	(29.1)	(17.4)	(11.7)	(10.0)	(8.4)	(1.7)
Total 5 years		84.7	72.6	12.1	3.0	1.4	1.6	81.6	71.1	10.5
White		85.8	72.6	13.2	2.8	1.1	1.7	83.0	71.5	11.5
Other races		79.7	72.8	6.9	4.1	3.0	0.7	75.6	69.4	6.1
(Black)		(79.9)	(73.0)	(6.8)	(3.8)	(2.8)	(1.0)	(76.1)	(70.2)	(5.9)
(Spanish origin)		(78.6)	(68.3)	(10.3)	(1.6)	(0)	(1.6)	(77.0)	(68.3)	(8.7)

[1]Numbers shown for "Black" are also included in "other races."

Note.–Details may not add to totals because of rounding.

Table 2.–Percent of children 3 to 5 years old enrolled in preprimary programs, by control of programs within levels and by age and race: 50 States and D.C., October 1980

Age and race	All preprimary programs			Nursery school			Kindergarten		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
Total 3-5 year	100	62.9	37.1	100	31.7	68.3	100	84.2	15.8
White	100	59.9	40.1	100	26.2	73.8	100	83.2	16.9
Black	100	78.2	21.8	100	61.2	38.8	100	89.2	10.5
Total 3 years	100	27.7	72.5	100	26.8	73.2	100	(**)	(**)
White	100	20.7	79.3	100	20.3	79.7	100	(**)	(**)
Black	100	64.2	36.6	100	62.1	37.9	100	(**)	(**)
Total 4 years	100	42.3	57.7	100	34.1	65.9	100	66.6	33.4
White	100	37.4	62.7	100	29.8	70.1	100	62.8	36.8
Black	100	65.4	34.6	100	58.6	41.4	100	77.6	22.4
Total 5 years	100	85.8	14.2	100	47.3	51.6	100	87.2	12.8
White	100	84.6	15.4	100	(**)	(**)	100	86.2	13.8
Black	100	91.5	8.5	100	(**)	(**)	100	92.5	7.8

(**)Base too small for presentation of percentage.
Note.–Details may not add to totals because of rounding.

Table 3 presents more detail on full-day and part-day attendance. In October 1980, just over one-half of white and about the same proportion of black 3- to 5-year-olds were enrolled in preprimary schools. Combined white and black enrollment accounted for over 97 percent of total enrollment. While 60 percent of enrolled white children attended public programs, so did 78 percent of enrolled black children (table 2). This larger enrollment rate of black children in public programs is reflected primarily in their 61-percent rate of enrollment in public nursery schools, compared with a 26-percent rate for white children. Secondly, the rate for black children in public kindergarten is 89 percent, while that for white children is 83 percent.

Metropolitan Status and Region

The preprimary school enrollment rate for children residing in metropolitan areas outside cities was 57 percent in October 1980; the enrollment rate for children living within the central cities was 55 percent; and the enrollment rate for children living in nonmetropolitan areas was 46 percent (table 4). The lower enrollment rate for nonmetropolitan areas is primarily due to low enrollment rates for both 3-year-olds and 4-year-olds relative to the corresponding rates in metropolitan areas. This is shown in figure 1. The enrollment rates for 5-year-olds were almost equal in the three metropolitan status categories. Four major regions of the Nation experienced small differences among their preprimary school enrollment rates. They ranged in October 1980 from 50 percent in the South to 57 percent in the Northeast, with rates of 52 and 53 percent in the North Central and West regions, respectively. Figure 2 shows the variation in enrollment rates by age for each region.

Table 3.–Preprimary enrollment of children 3 to 5 years old in full-day and part-day attendance, by level, age, and race/ethnicity: 50 States and D.C., October 1980

(Numbers in thousands)

Age and race/ethnicity[1]	Preprimary enrollment			Enrolled in nursery school			Enrolled in kindergarten		
	Total	Full day	Part day	Total	Full day	Part day	Total	Full day	Part day
Total 3-5 years	4,878	1,551	3,327	1,981	681	1,300	2,897	870	2,027
White	3,994	1,035	2,959	1,632	469	1,163	2,362	566	1,796
Other races	884	516	368	349	212	137	535	304	231
(Black)	(749)	(470)	(279)	(294)	(194)	(100)	(455)	(276)	(179)
(Spanish origin)	(370)	(156)	(214)	(146)	(79)	(69)	(224)	(77)	(147)
Total 3 years	857	321	536	825	313	512	32	8	24
White	697	220	477	676	218	458	21	2	19
Other races	160	101	59	149	95	54	11	6	5
(Black)	(134)	(90)	(44)	(24)	(84)	(40)	(10)	(6)	(4)
(Spanish origin)	(54)	(35)	(19)	(54)	(35)	(19)	(0)	(0)	(0)
Total 4 years	1,423	467	956	1,064	336	728	359	131	228
White	1,146	291	856	886	227	659	261	64	197
Other races	277	176	100	178	109	69	98	67	31
(Black)	(237)	(165)	(72)	(152)	(102)	(50)	(85)	(63)	(22)
(Spanish origin)	(118)	(50)	(67)	(87)	(42)	(45)	(30)	(8)	(22)
Total 5 years	2,598	763	1,835	93	32	61	2,505	731	1,774
White	2,150	524	1,626	70	24	46	2,080	500	1,580
Other races	448	239	209	23	8	15	425	231	194
(Black)	(377)	(215)	(162)	(18)	(8)	(10)	(359)	(207)	(152)
(Spanish origin)	(198)	(71)	(127)	(4)	(2)	(2)	(194)	(69)	(125)
				Percent of number enrolled					
Total 3-5 year	100.0	31.8	68.2	100.0	34.4	65.6	100.0	30.0	70.0
White	100.0	25.9	74.1	100.0	28.7	71.3	100.0	24.0	76.0
Other races	100.0	58.4	41.6	100.0	60.7	39.3	100.0	56.8	43.2
(Black)	(100.0)	(62.8)	(37.2)	(100.0)	(66.0)	(34.0)	(100.0)	(60.7)	(39.3)
(Spanish origin)	(100.0)	(42.2)	(57.8)	(100.0)	(54.1)	(45.9)	(100.0)	(34.4)	(65.6)
Total 3 years	100.0	37.5	62.5	100.0	37.9	62.1	100.0	(**)	(**)
White	100.0	31.6	68.4	100.0	32.2	67.8	100.0	(**)	(**)
Other races	100.0	63.1	36.9	100.0	63.8	36.2	100.0	(**)	(**)
(Black)	(100.0)	(67.2)	(32.8)	(100.0)	(67.7)	(32.3)	(100.0)	(**)	(**)
(Spanish origin)		(**)	(**)		(**)	(**)		(**)	(**)
Total 4 years	100.0	32.8	67.2	100.0	31.6	68.4	100.0	36.5	63.5
White	100.0	25.4	74.7	100.0	25.6	74.4	100.0	24.5	75.5
Other races	100.0	63.5	36.1	100.0	61.2	38.8	100.0	68.4	31.6
(Black)	(100.0)	(69.6)	(30.4)	(100.0)	(67.1)	(32.9)	(100.0)	(74.1)	(25.9)
(Spanish origin)	(100.0)	(42.4)	(56.8)	(100.0)	(48.3)	(51.7)	(100.0)	(**)	(**)
Total 5 years	100.0	29.4	70.6	100.0	34.4	65.6	100.0	29.2	70.8
White	100.0	24.4	75.6	100.0	(**)	(**)	100.0	24.0	76.0
Other races	100.0	53.3	46.7	100.0	(**)	(**)	100.0	54.4	45.6
(Black)	(100.0)	(57.0)	(43.0)	(100.0)	(**)	(**)	(100.0)	(57.7)	(42.3)
(Spanish origin)	(100.0)	(35.9)	(64.1)	(100.0)	(**)	(**)	(100.0)	(35.6)	(64.4)

(**)Base too small for presentation of percentage.

[1]Numbers shown for "Black" are also included in "other races."

Note.–Details may not add to totals because of rounding.

Figure 1. – Preprimary enrollment rate of children 3 to 5 years old, by metropolitan status and age: 50 states and D.C., October 1980

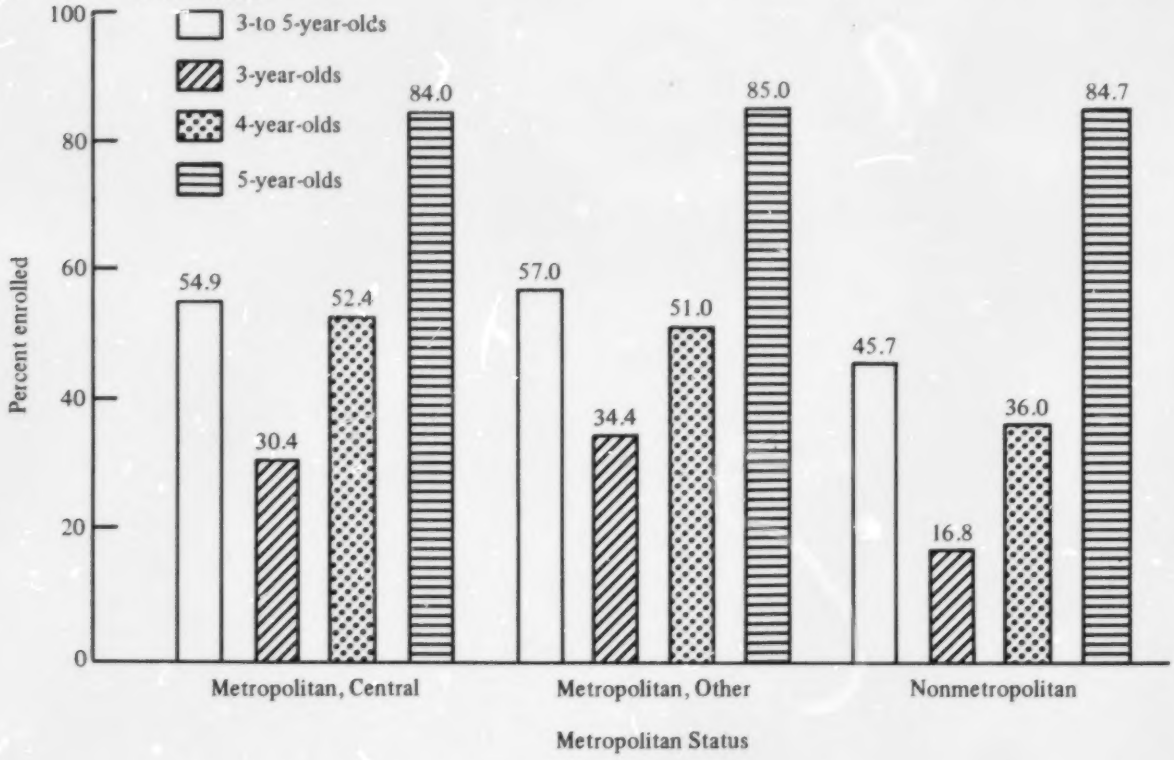


Figure 2. – Preprimary enrollment of children 3 to 5 years old as percent of population subgroup, by region and age: 50 states and D.C., October 1980

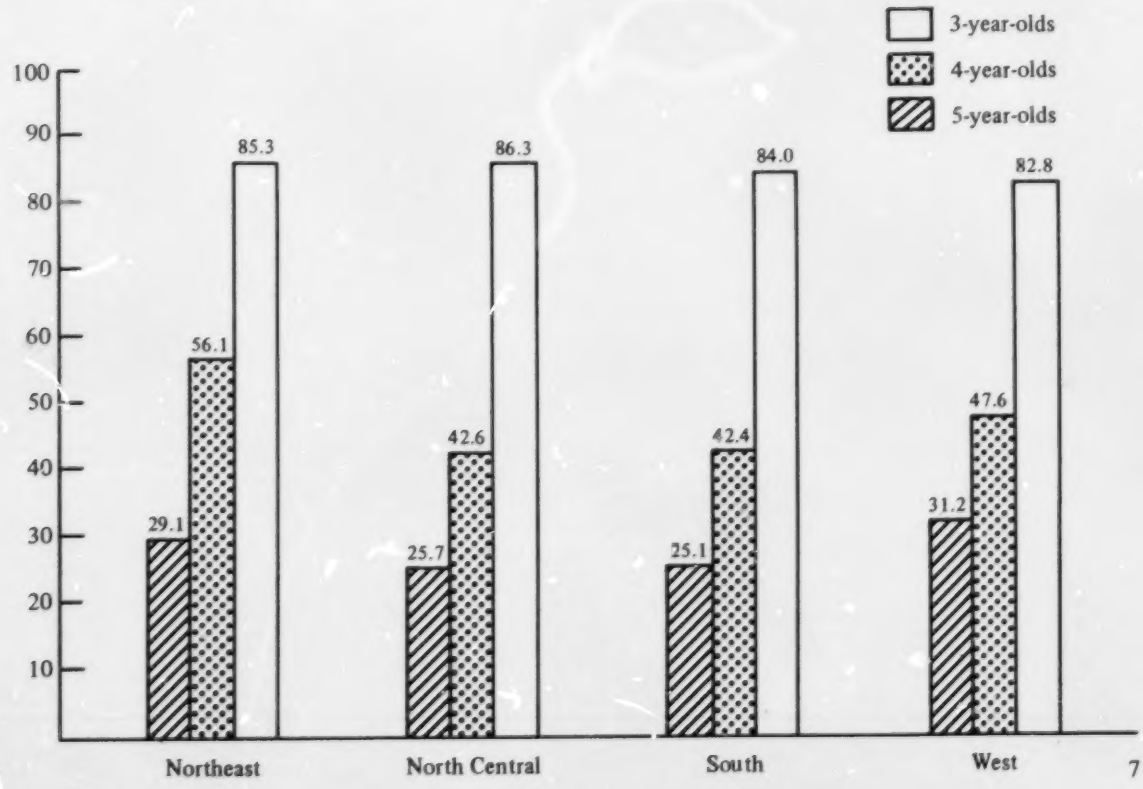


Table 4.–Population and preprimary enrollment of children 3 to 5 years old, by metropolitan status, age, and race: 50 States and D.C., October 1980

(Numbers in thousands)

Age and race[1]	Metropolitan central			Metropolitan, other			Nonmetropolitan		
		Enrolled			Enrolled			Enrolled	
	Population	Number	Percent	Population	Number	Percent	Population	Number	Percent
Total 3-5 years . .	2,588	1,420	54.9	3,528	2,010	57.0	3,169	1,448	45.7
White	1,690	946	56.0	3,146	1,797	57.1	2,744	1,251	45.6
Other races . . .	898	474	52.8	382	213	55.8	425	197	46.4
(Black)	(804)	(430)	(53.5)	(289)	(160)	(55.4)	(352)	(158)	(44.9)
Total 3 years	876	267	30.4	1,195	411	34.4	1,072	180	16.8
White	568	172	30.3	1,065	371	34.8	932	154	16.6
Other races	308	95	30.8	130	40	30.8	140	26	18.6
(Black)	(279)	(88)	(31.5)	(96)	(27)	(28.0)	(117)	(20)	(16.8)
Total 4 years	900	472	52.4	1,130	576	51.0	1,042	375	36.0
White	578	306	52.9	1,020	511	50.1	911	330	36.2
Other races	322	166	51.6	110	65	59.1	131	45	34.4
(Black)	(289)	(148)	(51.2)	(88)	(57)	(64.2)	(104)	(32)	(31.1)
Total 5 years	811	682	84.0	1,203	1,023	85.0	1,054	893	84.7
White	545	469	86.0	1,061	915	86.2	900	767	85.2
Other races	266	213	80.1	142	108	76.1	154	126	81.8
(Black)	(236)	(195)	(82.5)	(105)	(77)	(72.9)	(131)	(106)	(80.8)

[1]Numbers shown for "Black" are also included in "other races."

Family Income

The affluence of families has been generally related to their children's enrollment in preprimary schools, and especially nursery schools since relatively few nursery schools are free. In fall 1980, children in families with an annual income of at least $15,000 were more likely to be enrolled than were children of families having lower annual incomes (table 5). The percentage enrolled nationally of children 3 to 5 years old in preprimary schools, whose family incomes were $15,000 and higher, was 59 percent, compared with 45 percent for families with incomes below $15,000. The corresponding rate for children in families with incomes $20,000 and above was 64 percent. These larger enrollment percentages that accompanied higher family incomes were mainly associated with nursery school enrollment, and slightly so with kindergarten enrollment. The enrollment rates in nursery schools, based on total population, were 16 percent for children whose family incomes were below $15,000 and 27 percent for children from families with incomes $15,000 and above. These rates can be compared to the overall nursery school enrollment rate of 21 percent.

Occupation and Education of Household Head

The preprimary enrollment of 3- to 5-year-olds varies considerably with their family head's occupation as well as educational attainment. The rates in 1980 were: White collar–64 percent; blue collar or service–47 percent, with 47 percent also for family head unemployed or not in the labor force; and farm families–38 percent (table 6). The noticeably higher enrollment rates for white collar workers may reflect their ability to pay because of higher income levels. Since most prekindergarten programs are privately operated, enrollment is generally associated with ability to pay. Enrollment rates of total 3- and 4-year-olds also decrease in percent from those of white collar (52 percent) to farm families (23 percent). For this group, children whose household head was unemployed or not in the labor force had an enrollment rate (30 percent) very close to those of blue collar or service-occupation families (29 percent).

The preprimary enrollment rate of 3- to 5-year-olds increased in 1980 with each additional level of education achieved by the household head–ranging from a low of 42 percent for those whose household head had completed less than one year of high school to 68 percent for children in families whose head of household had completed 4 or more years of college (table 7). With approximately 85 percent of 5-year-olds attending kindergarten, enrollment rates for this age group varied slightly by educational attainment of the household head. They ranged from 79 percent for children whose household head had completed 8 years or less of school to 89 percent for those whose household head had completed 4 or more years of college. However, there is a considerably larger variation in enrollment rates among 3- and 4-year-olds who largely attended private programs. The enrollment rate for 3-year-olds increased from 15 percent for children whose head of household had completed less than 1 year of high school to 48 percent for those whose head had completed 4 or more years of college. The corresponding rates for 4-year-olds rose from 32 percent to 68 percent (table 7).

Table 5.–Population and preprimary enrollment of children 3 to 5 years old, by level of family income, age, and race: 50 States and D.C., October 1980

(Numbers in thousands)

Age and race[1]	Total all incomes	Under $5,000		$5,000-$9,999		$10,000-$14,999		$15,000-$19,999		$20,000 and over		Income not reported	
		Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled
Total 3-5 years	9,284	971	459	1,506	667	1,783	797	1,496	738	3,147	2,021	381	196
White	7,581	525	235	1,068	445	1,512	682	1,315	649	2,851	1,831	309	151
Other races	1,703	446	224	438	222	271	115	181	89	296	190	77	45
(Black)	(1,445)	(430)	(215)	(383)	(201)	(222)	(95)	(146)	(70)	(212)	(135)	(53)	(31)
Total 3 years	3,143	319	72	534	91	598	112	532	124	1,031	420	130	37
White	2,565	165	32	382	50	512	99	464	111	932	381	109	25
Other races	578	154	40	152	41	86	13	68	13	99	39	21	12
(Black)	(492)	(150)	(40)	(135)	(39)	(69)	(12)	(56)	(9)	(67)	(26)	(16)	(7)
Total 4 years	3,072	337	127	497	195	585	197	487	196	1,041	654	125	55
White	2,509	188	58	343	113	489	164	432	171	955	596	101	45
Other races	563	149	69	154	82	96	33	55	25	86	58	24	10
(Black)	(481)	(142)	(67)	(138)	(76)	(79)	(26)	(44)	(20)	(64)	(43)	(14)	(4)
Total 5 years	3,069	315	259	475	382	601	488	477	418	1,076	947	126	104
White	2,507	172	146	343	282	511	420	419	467	962	855	91	81
Other races	562	143	113	132	100	90	60	58	51	114	92	27	23
(Black)	(472)	(138)	(108)	(110)	(86)	(74)	(57)	(46)	(41)	(82)	(66)	(23)	(20)
		Enrolled as percent of population in subgroup											
Total 3-5 years			47.2		44.3		44.7		49.3		64.2		51.4
White			44.8		41.7		45.1		49.4		64.2		48.7
Other races			50.2		50.7		42.4		49.2		64.2		58.4
(Black)			(50.1)		(52.6)		(42.6)		(47.9)		(63.7)		(**)
Total 3 years			22.6		17.0		18.8		23.4		40.7		28.7
White			19.2		13.1		19.3		23.9		40.9		22.6
Other races			26.0		27.0		15.1		(**)		39.4		(**)
(Black)			(26.8)		(29.1)		(**)		(**)		(**)		(**)
Total 4 years			37.7		39.1		33.6		40.2		62.8		43.8
White			30.8		33.1		33.5		39.6		62.4		44.2
Other races			46.3		53.2		34.4		(**)		67.4		41.7
(Black)			(47.3)		(55.5)		(32.3)		(**)		(**)		(**)
Total 5 years			82.3		80.4		81.3		87.7		88.0		82.5
White			84.8		82.1		82.1		87.7		88.9		82.0
Other races			79.0		75.8		66.7		(**)		80.7		(**)
(Black)			(78.5)		(77.7)		(**)		(**)		(80.5)		(**)

(**) Base too small for presentation of percentage.

[1] Numbers shown for "Black" are also included in "other races."

Note.–Details may not add to totals because of rounding.

Table 6.–Population and preprimary enrollment of children 3 to 5 years old, by occupation, head of household, age, and race: 50 States and D.C., October 1980

(Numbers in thousands)

Age and race[1]	White-collar		Manual/service		Farm		Unemployed–NILF[2]		No household head	
	Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled
Total 3-5 years	3,187	2,037	4,022	1,896	278	107	1,528	714	269	125
White	2,859	2,830	3,359	1,559	261	96	904	411	198	98
Other races	328	207	663	237	17	11	624	303	71	27
(Black)	(229)	(151)	(586)	(293)	(15)	(7)	(572)	(282)	(43)	(15)
Total 3 years	1,068	442	1,356	277	109	15	503	102	107	21
White	960	395	1,130	219	101	11	298	52	75	20
Other races	108	47	226	58	8	4	205	50	32	2
(Black)	(73)	(33)	(203)	(51)	(5)	(1)	(188)	(47)	(23)	(2)
Total 4 years	1,027	645	1,357	510	79	28	533	207	77	34
White	920	577	1,143	409	73	24	311	107	62	29
Other races	107	68	214	101	6	4	222	100	15	5
(Black)	(75)	(52)	(188)	(87)	(6)	(4)	(205)	(92)	(7)	(2)
Total 5 years	1,092	950	1,309	1,109	91	64	491	406	85	69
White	978	857	1,086	932	87	61	295	251	61	49
Other races	114	93	223	177	4	3	196	155	24	20
(Black)	(81)	(66)	(195)	(156)	(4)	(3)	(180)	(143)	(13)	(10)
	Enrolled as percent of population in subgroup									
Total 3-5 years		63.9		47.1		38.3		46.7		46.3
White		64.0		46.4		37.0		45.5		49.2
Other races		63.1		50.8		(**)		48.6		(**)
(Black)		(65.8)		(50.0)		(**)		(49.3)		(**)
Total 3 years		41.4		38.9		13.4		20.3		19.9
White		41.2		19.4		11.3		17.4		26.0
Other races		43.5		25.7		(**)		24.4		(**)
(Black)		(**)		(25.1)		(**)		(25.0)		(**)
Total 4 years		62.8		37.6		35.0		38.8		44.7
White		62.7		35.8		(**)		34.4		(**)
Other races		63.6		47.2		(**)		45.0		(**)
(Black)		(69.0)		(46.3)		(**)		(44.9)		(**)
Total 5 years		86.9		84.7		70.8		82.7		81.1
White		87.6		85.8		70.9		85.1		(**)
Other races		81.6		79.4		(**)		79.0		(**)
(Black)		(81.4)		(80.0)		(**)		(79.4)		(**)

(**)Base too small for presentation of percentages.
[1]Numbers shown for "Black" are also included in "other races."
[2]Unemployed or not in the labor force (NILF).

Table 7.–Population and preprimary enrollment of children 3 to 5 years old, by years of school completed by head of household, age, and race: 50 States and D.C., October 1980

(Numbers in thousands)

Age and race[1]	Population 3 to 5 years old and preprimary enrollment, by years of schooling completed by household head											
	Elementary 0-8 years		High school 1-3 years		High school 4 years		College 1-3 years		College 4 years or more		No head of household	
	Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled	Population	Enrolled
Total 3-5 years	988	415	1,310	594	3,338	1,614	1,501	856	1,878	1,275	269	125
White	750	304	868	373	2,783	1,323	1,273	725	1,709	1,172	198	98
Other races	238	111	442	221	555	291	228	131	169	103	71	27
(Black)	(206)	(97)	(415)	(208)	(503)	(265)	(187)	(107)	(91)	(57)	(43)	(15)
Total 3 years	315	48	443	79	1,150	242	474	153	653	314	107	21
White	245	26	295	47	953	190	407	126	590	289	75	20
Other races	70	22	148	32	197	52	67	27	63	25	32	2
(Black)	(62)	(20)	(141)	(30)	(123)	(50)	(52)	(22)	(31)	(11)	(23)	(2)
Total 4 years	347	109	418	154	1,106	434	522	283	603	408	77	34
White	256	75	273	85	924	338	439	237	556	382	62	29
Other races	91	34	145	69	182	96	83	46	47	26	15	5
(Black)	(80)	(29)	(133)	(65)	(164)	(88)	(71)	(37)	(26)	(15)	(7)	(2)
Total 5 years	327	258	450	361	1,081	938	504	420	622	552	85	69
White	250	203	300	241	906	795	427	362	563	501	61	49
Other races	77	55	150	120	175	143	77	58	59	51	24	20
(Black)	(64)	(48)	(142)	(113)	(156)	(127)	(64)	(48)	(34)	(31)	(13)	(10)
	Enrolled as percent of population											
Total 3-5 years		42.0		45.3		48.3		57.0		67.9		46.3
White		40.6		42.9		47.5		56.9		68.6		49.2
Other races		46.6		50.0		52.4		57.5		60.9		(**)
(Black)		(47.1)		(50.1)		(52.7)		(56.9)		(63.2)		(**)
Total 3 years		15.1		17.9		21.0		32.2		48.1		19.9
White		10.6		16.0		20.0		(**)		48.9		26.0
Other races		(**)		21.6		26.4		(**)		(**)		(**)
(Black)		(**)		(21.2)		(27.2)		(**)		(**)		(**)
Total 4 years		31.5		36.9		39.2		54.2		67.7		44.7
White		29.5		30.9		36.5		54.0		68.8		(**)
Other races		37.4		47.6		52.7		55.4		55.3		(**)
(Black)		(36.3)		(49.2)		(53.7)		(**)		(**)		(**)
Total 5 years		79.1		80.2		86.8		83.3		88.7		81.1
White		81.2		80.3		87.8		84.8		89.0		(**)
Other races		71.4		80.0		81.7		75.3		(**)		(**)
(Black)		(**)		(79.6)		(81.7)		(**)		(**)		(**)

(**)Base too small for presentation of percentages.
[1]Numbers shown for "Black" are also included in other races.

EDUCATION AND LABOR STATUS OF MOTHER

The enrollment rate also appears to be closely related to the educational attainment of the mother (table 8). The rate ranged in fall 1980 from 37 percent for children whose mothers had attained an eighth-grade education or less to 70 percent for children whose mothers were college graduates. As shown in table 8, the same type of relationship holds separately for white and black children and for children of Spanish origin. In the latter case, the population bases for the combined interval is 69 percent, representing an attainment of 1 or more years of college. Thus, the enrollment rates for children of Spanish origin ranged from 29 to 69 percent, increasing for the mother's educational attainment of 8 years or less at the elementary level to the attainment of 1 or more years of college.

At each attainment level, except for college graduates, mothers in the labor force enrolled their 3- to 5-year-olds at a considerably higher rate than did mothers not in the labor force (table 9). The enrollment rates were nearly equal for children of working and nonworking mothers with at least a 4-year-college education.

Table 8.–Percent of children 3 to 5 years old enrolled in preprimary programs, by educational attainment of mother and race/ethnicity: 50 States and D.C., October 1980

Years of school completed by mother		Total	White	Black	Spanish origin
level	years				
Elementary	0 to 8	36.9	34.5	43.9	28.7
High school	1 to 3	44.5	42.9	48.5	42.9
High school	4.	51.0	50.5	54.4	51.4
College	1 to 3	60.6	61.1	57.8	(**)
College	4 or more	70.3	70.4	72.1	(**)

(**)Base too small to show the percent enrolled. For children of Spanish origin whose mothers attained 1 or more years of college (i.e., college 1-4 years or more), the enrollment rate is 68.5 percent.

Table 9.–Percent of children 3 to 5 years old enrolled in preprimary programs, by educational attainment and labor force status of mother, 50 States and D.C., October 1980

Years of school completed by mother		Mother in the labor force	Mother not in the labor force
level	years		
Elementary	0 to 8	42.8	34.3
High school	1 to 3	49.3	41.2
High school	4.	54.9	46.9
College	1 to 3	62.1	59.0
College	4 or more	70.2	70.4

As one would expect, the needs of working mothers are reflected in the rates of enrollment in nursery schools and kindergartens. While the population is almost equally divided between children with mothers in the labor force and those not in it, the enrollment rate for the former is 57 percent, while that for the latter is 49 percent (table 10). Enrollment rates were higher at all ages (3, 4, and 5) for children with mothers in the labor force than for children whose mothers were not in the labor force.

Table 10.–Preprimary school enrollment of 3- to 5-year-olds, by age group and by labor force status of mother: 50 States and D.C., October 1980

(Numbers in thousands)

Labor force status of mother	Total		3-year-olds		4-year-olds		5-year-olds	
	Enrolled	Enrolled all day	Enrolled	Enrolled all day	Enrolled	Enrolled all day	Enrolled	Enrolled all day
All children	4,878	1,551	857	321	1,423	467	2,598	763
With mother in labor force	2,480	1,002	497	260	755	332	1,229	413
Employed full time	1,445	713	292	198	457	260	696	255
Employed part time	811	196	163	42	245	44	402	111
Unemployed	225	94	41	20	53	28	131	46
With mother not in labor force	2,266	491	339	50	628	117	1,299	325
Keeping house	2,105	439	309	37	582	102	1,214	300
In school	77	36	15	10	23	12	39	16
Other	85	15	15	3	23	3	47	9
No mother present	131	57	21	13	39	19	70	26
	Enrolled as percent of age group							
All children	52.5	16.7	27.3	10.2	46.3	15.2	84.7	24.9
With mother in labor force	57.1	23.1	34.4	18.0	51.9	22.8	85.2	28.6
Employed full time	57.4	23.3	35.4	24.0	52.5	29.9	84.6	31.0
Employed part time	59.6	14.4	37.2	9.6	53.7	9.6	86.5	23.9
Unemployed	48.5	20.3	22.8	11.1	41.1	21.7	85.1	29.9
With mother not in labor force	48.9	10.6	21.5	3.2	41.5	7.7	84.5	21.1
Keeping house	48.5	10.1	20.9	2.5	40.2	7.2	83.9	20.7
In school	63.0	29.5	37.2	(**)	56.1	(**)	95.1	(**)
Other	51.1	9.0	26.4	(**)	38.3	(**)	95.9	(**)
No mother present	42.2	12.5	17.8	10.8	38.6	18.8	77.8	28.9

(**)Base too small for presentation of percentage.

Note.–Details may not add to totals because of rounding.

Trends in Preprimary Enrollments

In recent years, a steady growth in preprimary enrollment rates has occurred—perhaps because of the increasing rise in the number of mothers of young children working outside the home (table 11, figure 3). While the national population of 3- to 5-year-olds decreased 15 percent from 10.9 million in fall 1970 to 9.3 million in 1980, the number of children 3 to 5 years old enrolled in nursery schools and kindergartens increased 19 percent from 4.1 to 4.9 million during the same period. As a result, the proportion of children enrolled increased from 38 to 53 percent during the decade. Between fall 1970 and fall 1980, the proportion of enrolled 5-year-olds in kindergartens and a small number in nursery schools increased from 69 to 85 percent of the population, and the rate of enrolled 3- and 4-year-olds increased from 21 to 37 percent of all 3- and 4-year-olds.

Over the decade small changes have occurred in the proportion of all 3- to 5-year-old children attending publicly controlled preprimary programs versus those in private programs. The enrollment rate of the former group decreased 6 percentage points to 63 percent, while that of the latter group increased from 31 to 37 percent.

Currently, only a small difference exists in preprimary school enrollment rates among four major regions of the United States. For many years the South had a considerably lower rate than the other three regions. In 1970, the rates ranged almost 16 percentage points—from the South with a 28-percent enrollment rate; to the West with a 44-percent rate. By contrast, the regional rates in 1980 had a range of 7 percentage points—with both the South and North Central regions having the lowest, essentially equal, enrollment rates.

Between 1970 and 1980, full-day attendance at preprimary schools increased relative to part-day attendance. In fall 1970, 17 percent of enrolled 3- to 5-year-olds attended full-day sessions, while in fall 1980, 32 percent of nursery school children attended full-day sessions, as compared with 34 percent in 1980.[4] Full-day attendance at kindergarten programs accounted for 14 percent of enrollments in 1970, while full-day attendance increased to 30 percent in 1980.

Table 11.—Population and percent enrolled in preprimary programs of children 3 to 5 years old, by age: 50 States and D.C., selected years October 1970 to October 1980

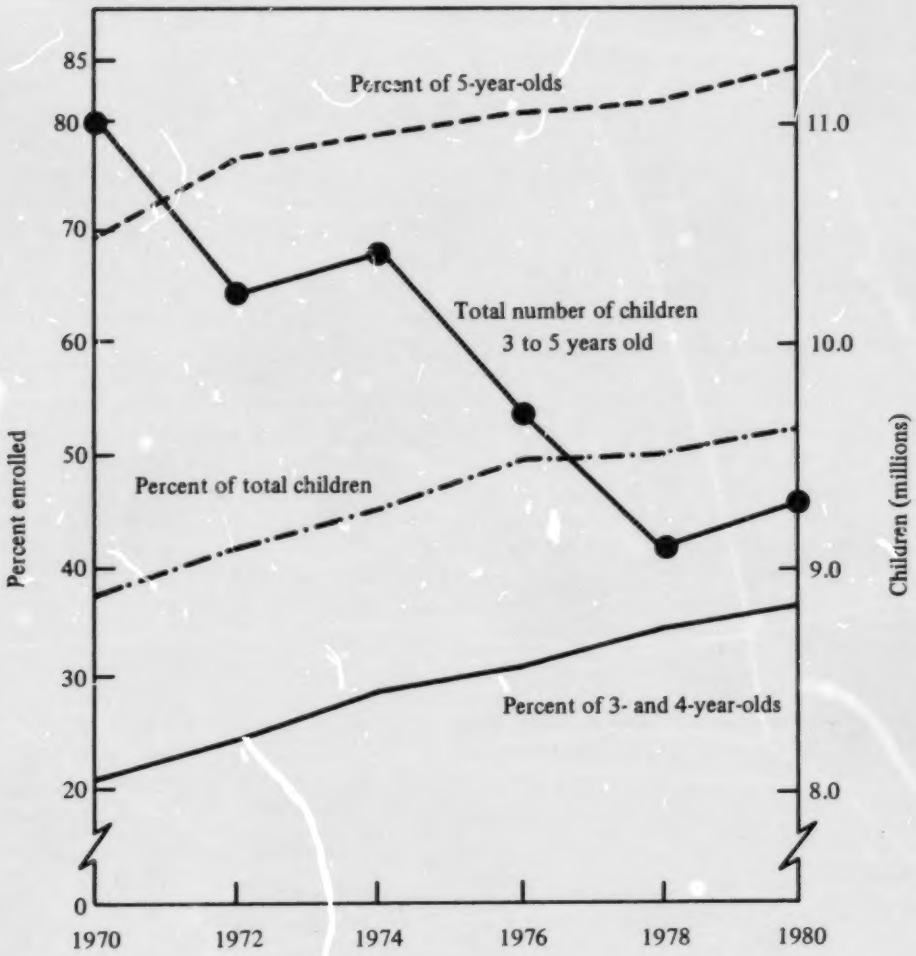
(Numbers in thousands)

Year	Population	Total enrolled	Percent enrolled	Population of 3- and 4-year-olds	Number enrolled	Percent enrolled	Population of 5-year-olds	Number enrolled	Percent enrolled
1970	10,949	4,104	37.5	7,136	1,461	20.5	3,814	2,643	69.3
1972	10,166	4,231	41.6	6,782	1,656	24.4	3,384	2,575	76.1
1974	10,393	4,699	45.2	6,966	2,007	28.8	3,426	2,693	78.6
1976	9,726	4,790	49.2	6,238	1,951	31.3	3,488	2,839	81.4
1978	9,112	4,583	50.3	6,052	2,072	34.2	3,060	2,511	82.1
1980	9,284	4,878	52.5	6,215	2,280	36.7	3,069	2,598	84.7

Note.—Details may not add to totals because of rounding.

[4] *Preprimary Enrollment*, October 1970, DHEW Publication No. (OE) 72-8.

Figure 3. Total number of children 3 to 5 years old and percent enrolled of total and subgroups (by age) in preprimary programs: 50 States and D.C., selected years, October 1970 to October 1980.



Minority Enrollment Characteristics

In fall 1980 white children constituted almost 82 percent of all 3- to 5-year-olds attending preprimary programs. Black enrollment was over 15 percent, and other races constituted almost 3 percent of the children in attendance. The children of Spanish origin accounted for nearly 8 percent of the total enrollment. These children may have been of any race. The following discussion shows differences in enrollment rates and other characteristics for black children and children of Spanish origin.

During the 1970's the enrollment rates of both white and black 3- to 5-year-olds generally increased each year—the white from 32 percent in fall 1970 to 53 percent in fall 1980; the black from 30 percent to 52 percent over the same period. Enrollment rates in fall 1980 for white and black 3- and 4-year-olds were 36 and 38 percent, respectively. The 1980 enrollment rates for 3- to 5-year-old whites and blacks appear essentially the same after consideration of statistical variation.

In October 1980, 377,000 black 5-year-olds attended preprimary programs, resulting in an enrollment rate of 80 percent. The corresponding rate for white 5-year-olds was 86 percent. In 1980, 5-year-old children of Spanish origin were enrolled at a 79-percent rate (as shown in the tabulation below), however, the overall enrollment rate of 3- to 5-year-olds of Spanish origin was only 43 percent.

Age group in years	Enrollment rate (in percent)		
	All children	Black	Spanish origin
3 to 5 . . .	52.5	51.8	43.3
3 and 4 . .	36.7	38.1	28.6
5	84.7	79.9	78.6

Available data show some differences among preprimary school enrollment rates related to the mother's work status of whites, blacks, and children of Spanish origin.[5] For example, the ratio of enrolled white 3- to 5-year-olds whose mothers were employed full time to those of all working white mothers was 61 percent. The corresponding ratio for black children of mothers employed full time was 76 percent; and for children of Spanish origin 78 percent. Another comparison between the three groups is the percent of children of mothers employed full time who were attending full-day sessions, based on all attending preprimary programs. More than 45 percent of the children of white mothers who were employed full time attended full-day sessions on a regular basis, while the corresponding rate for black children was 68 percent and 49 percent for children of Spanish origin with mothers employed full time.

In comparison with enrollment rates of white children, enrollment rates of black children and children of Spanish origin attending full-day sessions in both nursery schools and kindergartens were higher. Based on population, the enrollment rate in fall 1980 for white children attending full-day sessions in preprimary schools was 14 percent, compared with 33 percent for black children and 18 percent for children of Spanish origin.[6] Enrollment rates, based on total preprimary enrollment, showed 26 percent for white children attending full-day sessions, compared with 63 percent for black children and 42 percent for children of Spanish origin. Based on nursery school or kindergarten enrollment rates, table 3 shows: nursery school enrollment as 29 percent white, compared with 66 percent black and 54 percent of Spanish origin; kindergarten enrollment as 24 percent white, compared with 61 percent black and 34 percent Spanish.

[5] These data are derived from unpublished data tabulated October 1980 by the U.S. Bureau of the Census.

[6] These data are derived by calculation, using data contained in tables 1 and 3.

Appendix A—Definitions and Explanations

Age—The age classification is based on the age of the person on his last birthday preceding October 1980.

Family—As used in this report, family refers to a group of two or more persons related by blood, marriage, or adoption and residing together; all such persons are considered members of one family.

Family income—Income as defined in this report represents the combined total money income of all family members before deductions for personal taxes, Social Security, bonds, etc. It is the algebraic sum of money wages and salaries, net income from self-employment, and income other than earnings received by all family members during the 12 months prior to the survey.

Geographic regions—The four major regions of the United States, as defined by the Census Bureau, consist of the following State groups:

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.

North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Head of household—The "household head" is the person designated as such by the respondent for the household, regardless of whether he is related to other household members by blood, marriage, or adoption. Women are not classified as heads if their husbands are resident members of the family at the time of the survey. "No household head" refers to families in which the "household head" is a member of the Armed Forces, i.e., not residing at home.

Metropolitan/nonmetropolitan residence—The population residing in standard metropolitan statistical areas (SMSA's) constitutes the metropolitan population. An SMSA is a county or group of contiguous counties containing at least one city with 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county or counties containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, SMSA's consist of towns and cities, rather than counties. The metropolitan population in this report is based on SMSA's as defined in the 1970 census and does not include any subsequent additions or changes.

Nursery school—A nursery school is defined as a group or class that is organized to provide educational experience for children during the year or years preceding kindergarten. It includes instruction as an important and integral phase of its program of child care.

Occupations of Head of Household—A head of household (if employed or in the labor force) is categorized under one of the following types of occupations:

"White collar"—A combination of the following major groups used in the 1970 census: (a) professional, technical, and kindred; (b) managers and administrators, except farm; (c) clerical and kindred workers; and (d) salesworkers.

"Blue collar"—The total of the following major groups: (a) craft and kindred workers; (b) operatives, including transport; and (c) laborers, except farm.

"Farm workers"—Include (a) farmers and farm managers; (b) farm laborers and supervisores.

"Service workers"—Include (a) private household workers; (b) other service workers.

Part-day and full-day attendance—A child must attend school 2 hours or more to be considered enrolled. A nursery school enrollee may attend only 1 or 2 days per week. A "part-day" enrollee attends nursery school either in the morning or in the afternoon, but not in both. A "full-day" enrollee usually attends nursery school in both the morning and the afternoon. Kindergarten attendance is considered "part-day" (1) if the child usually attends either in the morning or in the afternoon, but not in both; or (2) if the child attends "full-day" but not every day of the week. A kindergarten enrollee is considered "full-day" if he or she attends both morning and afternoon classes each day at least 5 days per week.

Population coverage—The data presented in this report relate to the civilian noninstitutional population in the 50 States and the District of Columbia.

Preprimary program—A preprimary program is defined as a set of organized educational experiences intended for children attending nursery school and kindergarten classes. Such programs may be offered by a public or nonpublic school or by some other agency. Children enrolled in "Head Start" programs are counted under nursery school or kindergarten as appropriate. Institutions offering essentially custodial care, as many "day care centers" do, are not included.

Preprimary school enrollment—Preprimary school enrollment is the total enrollment of both regular kindergartens and nursery schools.

Public or nonpublic school—In this report, a public school is defined as any educational institution operated by publicly elected or appointed school officials and supported by public funds. Nonpublic schools include educational institutions established and operated by religious groups, as well as those under other private control.

Race—National total population data include whites, blacks, American Indians, Asians, and other races. In this report, whites and blacks have been shown independently.

Spanish origin—In 1980, a child's ethnicity was directly reported for the child. Responses to a question on origin or descent refer to a child's perceived national or ethnic lineage and do not necessarily indicate the country of birth of the child or the child's parents. The category "Spanish origin" includes persons of Mexican, Puerto Rican, Central or South American, and other Spanish origin.

Appendix B—Source and Reliability of the Estimates

The estimates in the tables are based on data collected in October 1980 from the Current Population Survey of the Bureau of the Census. This survey covers a sample spread over 629 areas, comprising 1,133 counties, independent cities, and minor civil divisions, with coverage in each of the 50 States and the District of Columbia. The sample is composed of approximately 66,000 occupied households that are eligible each month for interview. Of this number, 2,500 occupied units were visited, but interviews were not obtained because the occupants were not found at home after repeated calls or they were unavailable for some other reason.

The estimation procedure used in this survey involves the inflation of weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, race, and sex. Since the estimates are based on a sample, they may differ from the figures that would have been obtained from a complete census. There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Tables of standard errors are provided below for the data in the report, which primarily indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The full extent of the nonsampling error is unknown. Consequently, the reader is cautioned that particular care should be exercised in the interpretation of figures based on a relatively small number of cases or on small differences between estimates.

Sampling Variability. "Standard errors" are given in the tables below that are primarily measures of sampling variability—that is, of the variations that occurred by chance because a sample rather than the total population was surveyed. The sample estimate and its estimated standard error enable the reader to construct interval estimates that include the average result of all possible samples with a known probability. For example, if all possible samples were selected, each of these surveyed under identical conditions, using the same sample design, and an estimate and its estimated standard error were calculated for each sample, then: (1) approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average result of all possible samples; and (2) approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average result of all possible samples. The average result of all possible samples may or may not be contained in any particular computed interval. However, for a particular sample, one can say with specified confidence that the average result of all possible samples is included within the constructed interval.

Standard Error Tables and Their Use. In order to derive standard errors that would be applicable to a large number of estimates and could be prepared at a moderate cost, a number of approximations were required. Therefore, instead of providing an individual standard error for each estimate, generalized sets of standard errors are provided for various sizes of estimated numbers and percentages. These sets of standard errors, along with factors, give an indication of the order of magnitude of the standard error of an estimate rather than the precise standard error.

The figures presented in tables A-1 and A-2 are generalized standard errors of estimated numbers and estimated percentages. Estimated standard errors for specific characteristics cannot be obtained from tables A-1 and A-2 without the use of the factors in table A-3. These factors must be applied to the generalized standard errors in order to adjust for the combined effect of sample design and estimation procedures on the value of the characteristic. When an estimate involves two different categories, use the larger of the two factors corresponding to those categories. Generalized standard errors for intermediate values of estimates not shown in tables A-1 and A-2 may be approximated by interpolation.

Standard Errors of Estimated Numbers. The approximate standard error of an estimated number shown in the tabulations can be obtained by use of the formula

$$\sigma_x = f\sigma \qquad (1)$$

where "f" is the appropriate factor from table A-3 and σ is the standard error on the estimate obtained from table A-1.

Table A-1.–Standard errors of estimated numbers

(Numbers in thousands)

Size of estimate	Standard error	Size of estimate	Standard error
		750	35
10	4	1,000	40
25	7	1,500	48
50	9	2,500	59
100	13	5,000	72
250	21	7,500	71
500	29	9,000	65

Table A-2.–Standard errors of estimated percentage[1]

Estimated percentage	Base of estimated percentage (thousands)													
	10	25	50	75	100	250	500	750	1,000	1,500	2,500	5,000	7,500	9,000
2 or 98	5.8	3.7	2.6	2.1	1.8	1.2	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.2
5 or 95	9.1	5.7	4.1	3.3	2.9	1.8	1.3	1.0	0.9	0.7	0.6	0.4	0.3	0.3
10 or 90	12.5	7.9	5.6	4.6	4.0	2.5	1.8	1.4	1.3	1.0	0.8	0.6	0.5	0.4
20 or 80	16.7	10.5	7.5	6.1	5.3	3.3	2.4	1.9	1.7	1.4	1.1	0.7	0.6	0.6
35 or 65	18.1	11.4	8.1	7.3	6.3	4.0	2.8	2.3	2.0	1.6	1.3	0.9	0.7	0.7
50	20.8	13.2	9.3	7.6	6.6	4.2	2.9	2.4	2.1	1.7	1.3	0.9	0.8	0.7

[1] Caution should be used in comparing percentages computed on a base less than 75,000. As the standard errors on these percentages are relatively large, there is little chance that such comparisons would reveal useful information.

Table A-3.—"f" factors to be applied to tables A-1 and A-2 to approximate standard errors

Type of characteristic	Value of "f"
Kindergarten and nursery school enrollment	
Total, white or black children	1.0
Spanish children	1.5
Labor force status of mother or family head	
Total, white or black children	1.1
Spanish children	1.3
Mother or family head unemployed	
Total, white or black children	1.1
Spanish children	1.3
Years of school completed by mother	
Total or white children	1.1
Black children	1.3
Spanish children	1.5
Years of school completed by family head	
Total, white or black children	1.0
Spanish children	1.5
Children tabulated by family income	
Total or white children	1.5
Black children	1.6
Spanish children	2.4

Standard Errors of Estimated Percentages. The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends on both the size of the percentage and the size of the total upon which this percentage is based. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. When the numerator and denominator of the percentage are in different categories, use the factor or parameters indicated by the numerator. The approximate standard error, $\sigma_{(x,p)}$, of an estimated percentage can be obtained by use of the formula

$$\sigma_{(x,p)} = f\sigma \qquad (2)$$

where "f" is the appropriate factor from table A-3, and σ is the standard error on the estimate from table A-2.

When a percentage involves two different categories, use the larger of the two factors corresponding to those categories. For example, consider the percentage of children 3-5 years old from a family with an income of less than $5,000 per year enrolled in preprimary school in October 1980. The correct factor from table A-3 is 1.5 for family income, since it is larger than 1.0, the factor associated with kindergarten and nursery school enrollment.

Illustration of the Use of Tables of Standard Errors. Table 1 shows that in October 1980, an estimated 237,000 of all 3-year-old children were enrolled in public preprimary schools. Use of formula (1), which requires interpolation from table A-1 to obtain an unadjusted standard error (2) and the application of the appropriate "f" factor from table A-3, gives a standard error of approximately 1.0 × 20,000 = 20,000. Therefore, the standard error of the estimate of 237,000 children is 20,000. The 68 percent confidence interval is from 217,000 to 257,000. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Similarly, we could conclude with 95 percent confidence that the average estimate derived from all possible samples lies within an interval from 197,000 to 277,000 children (i.e., 237,000 = (2 × 20,000).

Table 1 shows that 17.1 percent of the 854,000 children of Spanish origin, 3 to 5 years old, were enrolled in nursery school in October 1980. Table A-2 indicates, with the use of a double interpolation between 10 and 20 percent and 750,000 and 1,000,000, the standard error on this percentage to be 1.7 percent. Applying the appropriate factor from table A-3 and using formula (2), the approximate standard error is $1.5 \times 1.7 = 2.6$ percent. Consequently, the 68 percent confidence interval as shown by this data is from 14.5 percent to 19.7 percent, and the 95 percent confidence interval is from 11.9 percent to 22.3 percent.

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